



Blackfoot River Corridor Noxious Weed Management Project

Project cooperators dedicated to enhancing and preserving the local environment continue to form the backbone of the implementation and sustainability of this project. The continued commitment of private landowners and public agencies to work together to fulfill the conservation need have made the objectives of Powell and Missoula counties and the surrounding watershed management areas a monumental and nationally recognized success since its inception almost 12 years ago. For the past several years, Powell County Weed District, in conjunction with Missoula County Weed District and the Blackfoot Challenge, has played a critical role within the state of Montana by promoting cooperative landowner-led integrated weed management across public and private boundaries. Today, all landowners within the project management area are actively participating in, and contributing resources to, the project. On the ground project accomplishments include engaging landowners at annual educational and planning forums, the facilitation of youth organization vegetation management education, biannual weed pulls, completing an inventory and mapping of present noxious weed species, and implementing herbicide and biological control of leafy spurge. The development of a Powell County GIS Weed database in cooperation with Missoula County Weed District, and the efforts of cooperators across private and public political boundaries in Montana to develop and maintain an interactive, inclusive weed/vegetation management map database are ongoing.

Landowners and land managers within the project area formed a cooperative management area and have been applying herbicide and biological control insect

releases to control leafy spurge infestations within the project area for the past 12 years utilizing Montana Noxious Weed Trust Fund cost-share grants and other funding sources. While reduction and management of leafy spurge has been quite successful, other noxious weeds have not been addressed. Monitoring of treatment success and vegetation inventory efforts through GPS data collection and GIS mapping have indicated that several other noxious weed species need to be included in the vegetation management strategy for the project area. Landowners attending the planning meeting in April of this year agreed that a more inclusive approach was necessary in order to further facilitate the restoration of desirable plant species.

Activities and Measurable Results

Following are the proposed project objectives, strategies, measurements of success, and future activities:

Objective: Advance integrated noxious and invasive weed, and desirable vegetation management through support of 15 cooperative landowners within the Cooperative Vegetation Management Area

Strategy/Activity: Provide up to 50% cost-share to landowners and managers to prevent, manage and/or eradicate noxious and invasive weeds. Projects include biological control, education and outreach, and contract herbicide application from water's edge to high water mark via boat, and associated upland chemical control. All treatment areas will be mapped and entered into the Powell County and Missoula County GIS Weed data bases.

Benchmark of Success: Success will be measured in terms of number of active cooperators; acres treated, and integrated management tools utilized including monitoring and mapping. Powell County Weed District and Missoula County Weed District will continue to work together to leverage resources and track both the reduction and spread of noxious weeds within the project area utilizing GIS and GPS

Continuation of Current Activities: Promote education and awareness through hosting annual spring and fall landowner and land manager meetings, hosting youth programs, and providing weed identification and management resources to private and public land managers, and continue to strive for and adapt to enhanced and improved management practices

Species

Major threats to desirable vegetation management and wildlife conservation for landowners and land and wildlife managers within the project area include the presence of at least 5 noxious weeds listed by the state of Montana. Well established noxious weeds already affecting several hundred acres include spotted knapweed (*Centaurea maculosa*), leafy spurge (*Euphorbia esula*), Canada thistle (*Cirsium arvense*), ox-eye daisy (*Chrysanthemum leucanthemum*). New threats to the project area include noxious weeds moving westward within the state of Montana and across state and national borders include purple loosestrife (*Lythrum salicaria*), Eurasian watermilfoil (*Myriophyllum spicatum*), flowering rush (*Butomus umbellatus*), and salt cedar (*Tamarix* spp.). Vegetation management efforts within the project area will continue to

contribute to the decrease in non-native fish species and an increase in native trout species, in particular fluvial Westslope cutthroat trout.

The conservation need of this project directly supports the goals and directives of the Powell County Weed Management Plan to develop and maintain desirable, weed resistant vegetative communities that meet the management objectives of public and private land managers while supporting healthy wildlife and native fish populations. Effective treatment of noxious weeds will protect valuable native habitat in forested areas, rangeland, riparian and aquatic ecosystems by limiting soil erosion, protecting water quality, reducing resource competition, and reducing seed production and spread. An early detection and rapid response approach to new invaders while effectively managing widespread, established weed populations in existing plant communities such as native bunch grass and riparian areas can prevent the evolution of these habitats to monocultures of noxious weeds with little to no fisheries value.

In Kind

The Powell County Weed Board will contribute project administration, GIS database maintenance, and project facilitation including coordination and notification of cooperators prior to herbicide application in-kind. To assist in management efforts for lands located within and adjacent to the project area, a no cost equipment rental program will provide small and large scale herbicide application equipment, and no-till and broadcast seeding implements. Literature, site evaluation, mapping services, contractor lists, and aerial spray coordination, weed management recommendations, and landowner herbicide application labor will also be contributed in-kind.